Umme Tasnim

Date 11/07/2023

ENG1101

Word Count: 1936

U2 Reflective Annotated Bibliography

Introduction

I've always wondered about the origins and consequences of climate change, a question that has intrigued me since my childhood. Initially, the concept of global warming frightened me, leading me to avoid delving into the topic. However, I now feel a strong urge to find answers to my lingering questions and gain insights into how climate change is impacting all living organisms today. My research question is centered on understanding the roots of climate change, examining its current effects, and exploring potential solutions. I'm eager to not only identify the causes but also comprehend the practical implications of climate change on our environment and all living beings. My ultimate goal is to contribute to addressing this issue by uncovering effective ways to mitigate its impact. This research journey is more than just a scientific exploration; it stems from a personal connection to the subject and a determination to increase awareness and knowledge about the pressing global challenge of climate change.

Source Entries

Citation #1:

Al Jazeera, Al Jazeera, 1 Dec. 2019, "What is climate change" https://www.youtube.com/watch?v=dcBXmj1nMTQ. Accessed 13 Nov. 2023.

Summary: we started to break CO2 in 1950 starting from the Industrial Revolution and this is because of human activities, for example burning fossil fuels which releases CO2. these fossil fuels are what help power our homes, factories, airplanes, and cars. over the last 70 years, the world population has tripled and we consuming more animals which releases another pollutant called methane. All those gases are in the air, and when sunlight gets into the Earth's atmosphere, some of the heat gets trapped, and the planet gets warmer. this is called the greenhouse effect, the issue is how fast the Earth is warming up. Climate change causes sea levels to rise, droughts, and natural disasters.

Reflection:

The historical perspective, linking the increase in carbon dioxide emissions to the Industrial Revolution and subsequent population growth, highlights a critical timeline in understanding the

origins of the issue. The dependency on fossil fuels for various aspects of modern life, from energy production to transportation, emerges as a major contributor to the rise in greenhouse gases, particularly CO2. The mention of the global population tripling over the past 70 years and the associated increase in animal consumption shedding light on methane emissions adds layers to the complexity of the climate change challenge. The interconnectedness of these factors in contributing to the greenhouse effect is explained, emphasizing the role of human activities in trapping heat in the Earth's atmosphere and subsequently causing a warming effect. The reflection also draws attention to the urgency of the situation, as the Earth's warming is noted to be occurring at an accelerated rate. The consequences of climate change, including rising sea levels, droughts, and more frequent natural disasters, are presented as tangible and concerning outcomes of this warming trend. This information prompts reflection on the need for global awareness, responsibility, and concerted efforts to address the root causes of climate change and mitigate its far-reaching effects on the environment and societies worldwide.

Quotation: In the video Al Jazeera highlights a critical perspective on global temperature rise and its potential consequences, "the UN says if we warm by 1.5 degrees before the end of the century, we should be fine. The UN says even 2 degrees would 'probably' be alright. But again, the problem is speed. Because right now, we are on track to hit 1.5 degrees in only ten years. And If we don't slow that warming down, it could mean catastrophe"

Citation #2:

Dwyer, James. "Van Rensselaer Potter, Climate Change, and Justice." Canadian Journal of Bioethics [Revue canadienne de bioéthique], vol. 5, no. 1, 3 Jan. 2022, pp. 92+. Gale Academic OneFile,

link.gale.com/apps/doc/A701138075/AONE?u=cuny_nytc&sid=bookmark-AONE&xid=b4bbac 93. Accessed 13 Nov. 2023.

Summary:

The provided text emphasizes the extensive and robust evidence supporting the assertion that human activities are the primary cause of climate change. This evidence spans various scientific disciplines, including physics, chemistry, biology, earth sciences, and more. Notably, fossil fuel companies have attempted to sow doubt about climate change, adopting tactics similar to those used by tobacco companies. Greenhouse gas emissions surpass the Earth's natural absorption capacity, leading to a rise in atmospheric greenhouse gas levels. Carbon dioxide (CO2), a major contributor to global warming, has increased significantly since the preindustrial era, reaching over 410 parts per million by 2019. The elevated CO2 levels trap heat in the atmosphere, resulting in a myriad of environmental changes such as rising temperatures, altered precipitation patterns, intense storms, and melting ice masses. These changes in Earth's systems contribute to various environmental problems, including heatwaves, floods, droughts, wildfires, and more. Importantly, these environmental issues have profound implications for human health, causing

heat-related illnesses, cardiovascular problems, displacement due to storms and rising sea levels, water shortages, food insecurity, and the spread of diseases.

Reflection:

The summary of the provided text underscores the compelling and diverse evidence supporting the human influence on climate change. It succinctly captures the multi-disciplinary nature of this evidence, ranging from physics to history, and draws attention to the tactics employed by fossil fuel companies to cast doubt on climate change, likening them to strategies previously used by tobacco companies. The escalating levels of greenhouse gases, notably carbon dioxide, are presented as a central concern, leading to a cascade of environmental changes with far-reaching consequences. The summary effectively outlines the various environmental problems arising from climate change, emphasizing their direct impact on human health, including heat-related illnesses, displacement due to extreme weather events, and increased risks of diseases. Additionally, the summary adeptly brings to light the indirect yet substantial implications of climate change on human well-being. By diminishing livelihoods, especially among economically vulnerable populations dependent on healthy ecosystems, climate change is predicted to prompt significant migration. The summary concludes by noting the blurring lines between environmental and economic migration, as well as between forced and voluntary displacement, adding a layer of complexity to the societal consequences of climate change.

Quotation:

Dwyer's quote underscores the comprehensive and robust nature of the evidence supporting the assertion that human activities are responsible for climate change, "The evidence that human activity is causing climate change is very extensive and robust (9). The data and accounts in support of anthropogenic climate change come from physics, chemistry, biology, earth sciences, oceanography, history, ethnology, and other disciplines. The accounts include theories and models that explain past changes and predict future changes. The robustness of the evidence is reflected in both the scientific consensus, as indicated in peer-reviewed articles, and corporate strategy. Following the strategy used by tobacco companies to counter the evidence that smoking causes health problems, fossil fuel companies have tried to create the appearance of doubt about climate change"

Citation #3

Tenbrink, Thora, and Simon Willcock. "Place attachment and perception of climate change as a threat in rural and urban areas." PLoS ONE, vol. 18, no. 9, 6 Sept. 2023, p. e0290354. Gale Academic OneFile,

link.gale.com/apps/doc/A763589332/AONE?u=cuny_nytc&sid=bookmark-AONE&xid=3c2fec2 b. Accessed 13 Nov. 2023.

Summary:

The provided text discusses the relationship between people's perceived attachment to a place, the threat of climate change, and how this relationship may vary between rural and urban settings. The authors highlight the importance of understanding how individuals' connections to their environment, known as place attachment, might influence their perceptions of climate change. The text introduces the idea that individuals with a strong attachment to a place, especially in rural areas, maybe more aware of and concerned about climate change due to their direct dependence on the local environment for their livelihoods. The concept of red-loop and green-loop systems is introduced, where rural areas are depicted as green-loop systems heavily dependent on local ecosystems, while urban areas are red-loop systems that capitalize on ecosystem services from distant ecosystems. The text outlines the scientific evidence of climate change, emphasizing its global impact and spatial variability. It discusses the increasing temperatures, extreme weather events, and disruptions observed in the UK and acknowledges that the threat and impacts of climate change vary across different regions and communities. The discussion then delves into the complex relationship between place attachment, rurality, and perceptions of climate change. The authors express the need to understand the subjective experience of place attachment, which includes anthropocentric and geographic facets. The rural-urban distinction is acknowledged as a central dimension affecting satisfaction and place attachment.

Reflection:

The text delves into a nuanced exploration of the intricate relationship between people's attachment to their surroundings, their awareness of climate change, and how this dynamic may differ between rural and urban environments. The introduction of red-loop and green-loop systems offers a compelling framework, highlighting the dependence of rural areas on local ecosystems and the contrasting reliance of urban areas on services from distant ecosystems. The emphasis on the spatial variability of climate change impacts and the acknowledgment of regional variations in threat levels underscore the complex nature of this global challenge. The recognition that rural populations, directly tied to their local environment, might be more attuned to the impacts of climate change due to their reliance on the land for sustenance adds depth to the discussion. The text raises critical questions about the subjective experience of place attachment and the challenges associated with quantifying this multifaceted concept. The suggestion to use qualitative methods, particularly free-text responses, offers an intriguing avenue to capture the richness and diversity of individuals' connections to their surroundings.

Quotation: This quote by Tenbrik and Simone highlights a compelling connection between rural environments and elevated levels of attachment among residents, they state, "There is some evidence that rural areas may generally lead to higher levels of attachment [30], possibly because rural people depend on their local environment more [31]. This in turn correlates with a higher degree of willingness to engage in the preservation of the landscape in question [4,32], linked to rural community resilience [33]. With climate change affecting local communities, individuals

either need to adapt or migrate. As higher place attachment implies a higher motivation for staying in a place and adapting, rather than giving up a place associated with culture and identity [34], the link between place attachment and climate change becomes particularly crucial for policy responses [35,36]."

Conclusion

I have found many interesting facts and perspectives while researching about climate change. I learned that understanding how people feel about where they live, the urgency of climate change, and the differences between rural and urban areas is crucial. Rural places, because they directly rely on their local environment, make residents more attached. The quote from Tenbrik and Simone stresses the importance of rural attachment for climate resilience and policy responses. Al Jazeera's video underlines the urgent need to slow down global warming, especially as we approach the critical 1.5-degree threshold. Dwyer's research provides a detailed account of environmental changes resulting from climate change, including impacts on health and society, and stresses the need to address the root causes quickly. What's clear is how different factors connect, how personal attachments affect climate change views, how ecosystems contribute to global warming, and how corporate strategies reflect historical attempts to cast doubt on science. This collective understanding shows that climate change isn't just an environmental problem but a complex issue with socio-cultural, economic, and public health implications. The main audience for this research includes policymakers, environmental advocates, and community leaders. Recognizing the relationship between place attachment and climate change views can help in creating specific policies and strategies for rural and urban communities. These insights are essential for developing effective plans to tackle climate change that consider diverse perspectives and responses to environmental challenges.